

ABSTRACT OF THE DISCLOSURE

An ion implantation method is disclosed which can suppress point defects in a crystal semiconductor material that can arise from ion implantation in a semiconductor device manufacturing process. According to an embodiment, in a semiconductor device manufacturing process, in the place of an ion implantation step of a heavy ion, such as indium (In), in which the channeling phenomenon does not substantially occur in the formation of a pocket diffusion layer region, such a heavy ion can be implanted so that an implant angle (3) becomes $50^{\circ} \pm 6^{\circ}$ with respect to an exposed Si (100) face of an Si (100) substrate (2). Then, implanted ions can be activation with a thermal treatment step to form a pocket diffusion layer region.